

# Fire Operations Equipment

*Presented by: Khaled AlGhadhban*

Business Opportunities Workshop

January 13<sup>th</sup>, 2025

This presentation may contain certain forward-looking statements. All statements other than statements relating to historical facts are, or may be deemed to be, forward-looking statements. Forward-looking statements include, but are not limited to, statements related to future events or to the company's future financial or operating performance such as the company's expectations and projections regarding its growth, initiatives and strategies, capital expenditures and investments, customer and partner relationships, major projects and product development. These statements may generally, but not always, be identified by the use of words such as "target," "goal," "aim," "believe," "expect," "commit," "anticipate," "intend," "estimate," "should," "will," "shall," "may," "likely," "plan," "strategy," "initiative," "project," "outlook" or similar expressions, including variations and the negatives thereof.

Forward-looking statements reflect the company's expectations, beliefs, estimates, forecasts, projections and assumptions, only as of the date such statements are made, and are subject to known and unknown risks, uncertainties and other important factors beyond the company's control that could cause the company's actual results, performance or achievements to be materially different from the expected results, performance, or achievements expressed or implied by such statements. Factors that could cause actual results to differ materially from the company's expectations include, among other things, the following: global supply, demand and price fluctuations of oil, gas and petrochemicals; global economic conditions; competition in the industries in which the company operates; climate change concerns, weather conditions and related impacts on the global demand for hydrocarbons and hydrocarbon-based products; risks related to the company's ability to successfully meet its ESG targets, including its failure to fully meet its GHG emissions reduction targets by 2050; conditions affecting the transportation of products; operational risk and hazards common in the oil and gas, refining and petrochemicals industries; the cyclical nature of the oil and gas, refining and petrochemicals industries; political and social instability and unrest and actual or potential armed conflicts in the MENA region and other areas; natural disasters and public health pandemics or epidemics; the management of the company's growth; the management of the company's subsidiaries, joint operations, joint ventures, associates and entities in which it holds a minority interest; exposure to inflation, interest rate risk and foreign exchange risk; risks related to operating in a regulated industry and changes to oil, gas, environmental or other regulations that impact the industries in which the company operates; legal proceedings, international trade matters, and other disputes or agreements; and other risks and uncertainties that could cause actual results to differ from the forward-looking statements in this presentation, as set forth in the latest periodic reports filed by the Saudi Arabian Oil Company ("Aramco") with the Saudi Exchange. For additional information on the potential risks and uncertainties that could cause actual results to differ from those presented please see Aramco's most recent annual periodic report filed with the Saudi Exchange and any subsequent filings thereto.

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All subsequent written and oral forward-looking statements attributable to us or to persons acting on our behalf are expressly qualified in their entirety by this cautionary statement.

# Introduction

# iktva Program Overview (1/2)

The In-Kingdom Total Value Add (iktva) program is designed to drive increased investment, economic diversification, job creation, and workforce development within the Kingdom

Saudi Aramco aims to achieve 70% localization of all spending




**iktva in Procurement**

2000+	290+
Service contracts	Corporate purchase agreements






**Business Opportunities**

12	210	\$35 bn
Sectors	Business Opportunities	Annual Market Size



**Anchor Projects**

		
IMI	SPARK	Tuwaiq
6 Anchor projects		



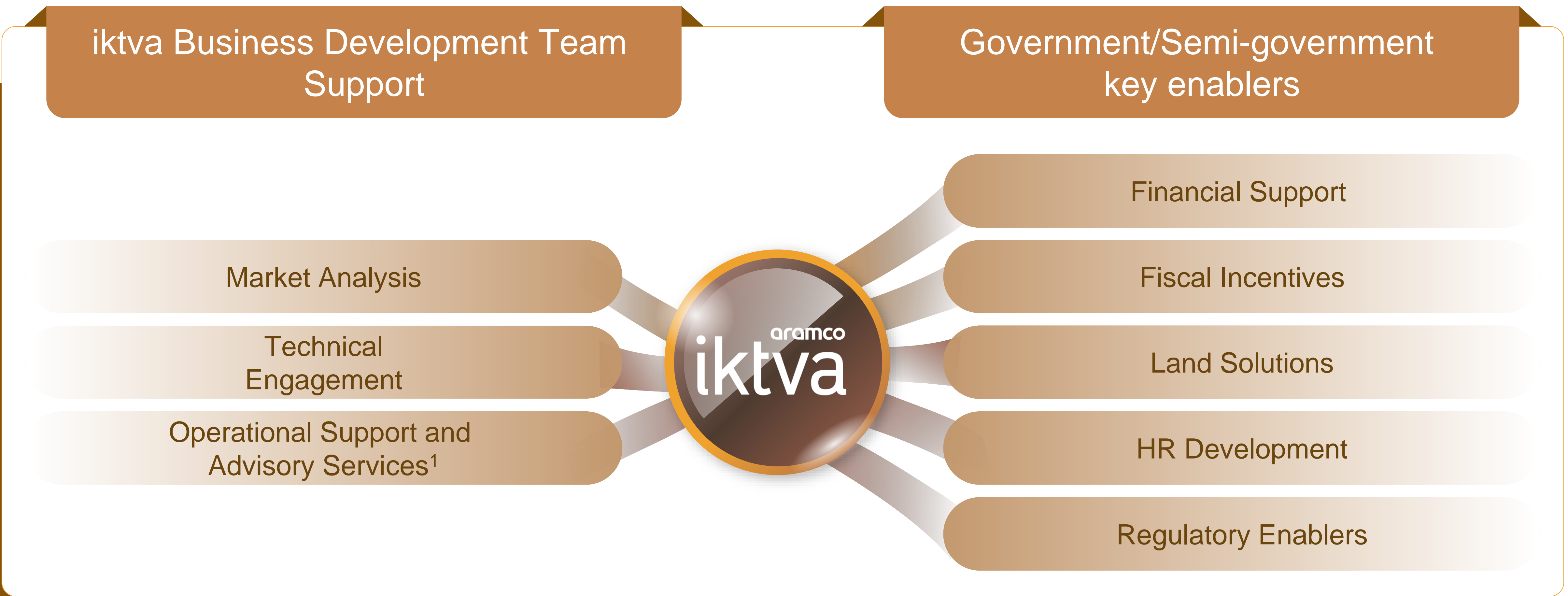
**Local Workforce Development**

16	90+
National training centers	Programs

**Catalyzing Supply Chains**

Note: IMI = International Maritime Industries; SPARK = King Salman Energy Park

Instrumentation workshop











Instrumentation workshop

**Catalyzing Supply Chains**

1. Includes broad range of support services provided by the team: user requirements, advisory on available financial and fiscal incentives, guidance on localization process in line with local regulations and standards, action plan development etc.

# Why invest in KSA?

Non-exhaustive

 Strong GDP growth and healthy economy	 Big market and game-changing opportunities	 Government incentives and enablers	 Ease of doing business	 Strategic global location	 Favorable demographics
<b>Top 20</b> economies globally	<b>5</b> Special Economic Zones drive innovation	<b>\$1.3T+</b> invested in private sector by 2030	 one of world's most rewarding tax systems	<b>12-15%</b> of global trade passes via Red Sea	<b>17%</b> population growth from 2013-2023
<b>GDP growth</b> among highest projected in 2025 in top economies	<b>6</b> giga projects driving urbanization and industry	<b>5.7%</b> contribution of FDI to GDP by 2030	<b>Top 5</b> in the MENA region for ease of doing business	 KSA container ports are among the most efficient globally	<b>67%</b> of population below the age of 35

## Catalyzing Supply Chains

Note: FDI = Foreign Direct Investment  
Source: IMF; MISA; Vision 2030 Key Performance Indicators; Shareek Program; World Bank

# How do we define what is an opportunity?



**Growing market**

*High growth high spend markets*



**Limited local players  
& import driven**

*Markets with few local contributors  
and high import resilience*



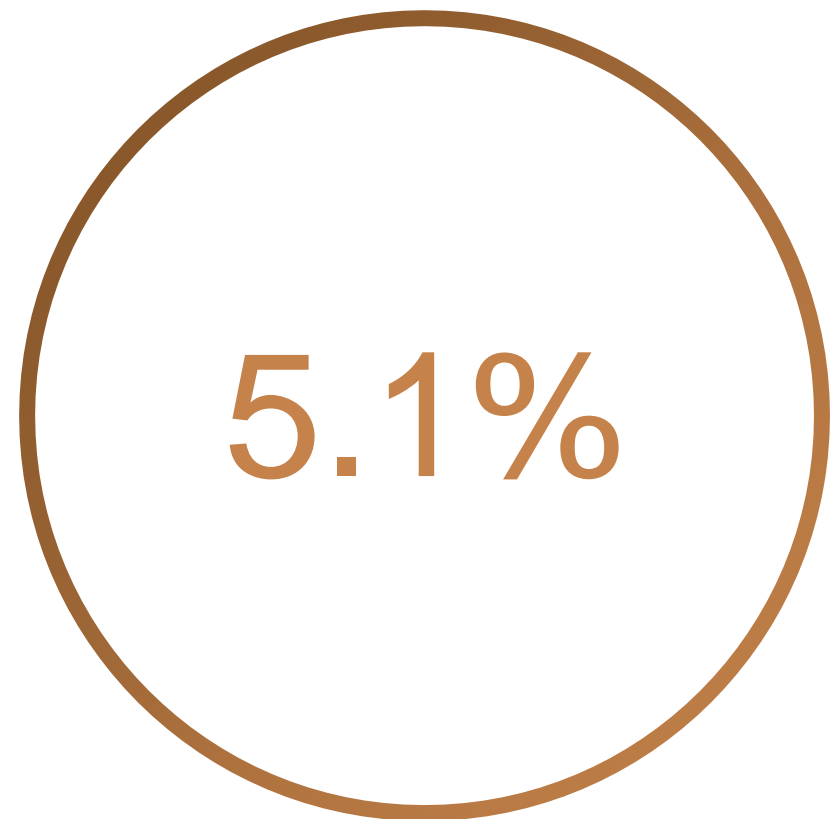
**Technological  
& labor feasibility**

*Markets with accessible or  
standardized technology and  
available skilled labor*

## KSA and other GCC fire protection market size 2025, Million USD



KSA market size for opportunities in today's fire protection workshop



Forecasted 5-year CAGR

## Seventeen opportunities to be discussed today

- 1 Fire Extinguishers
- 2 Fire Extinguisher/Hydrant Covers
- 3 Fire Hydrants
- 4 Fire Hydrants Mounted Monitor
- 5 Fire Pump Controllers
- 6 Fire Sprinklers Systems
- 7 Valves for Fire Water Systems
- 8 Respirator
- 9 Fire Stopping Barrier
- 10 Foam Generation Skid
- 11 Fire Alarms and Detection Systems
- 12 Fire Hose Nozzle
- 13 Fire Extinguishing Blanket
- 14 Fireman Coat and Pant
- 15 Fireman Helmet
- 16 Firefighter Boot
- 17 Safety Hood

# Agenda - Business Opportunities

## Fire Operations Equipment

No.	Title of the Investment Opportunity	Presenter
	Opening Remarks	Khaled AlGhadhban
11	Respirator	Meshal Albash
12	Fire Hose Nozzle	Meshal Albash
13	Fire Extinguishing Blanket	Meshal Albash
14	Fireman Coat and Pant	Meshal Albash
15	Fireman Helmet	Ghala Al Hajri
16	Firefighter Boot	Ghala Al Hajri
17	Safety Hood	Ghala Al Hajri
	Closing Remarks	Khaled AlGhadhban

# 11 Respirators

*Presented by: Meshal Albash*

# Respirators Opportunity Profile

1

Respirators present an attractive investment opportunity

### Types

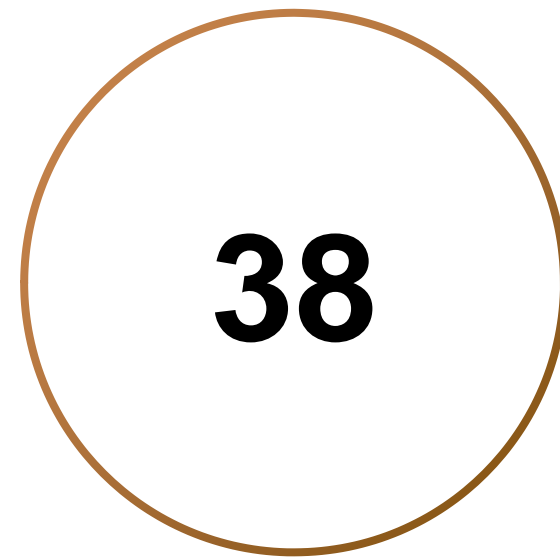


Independent Air Supply (SCBA):

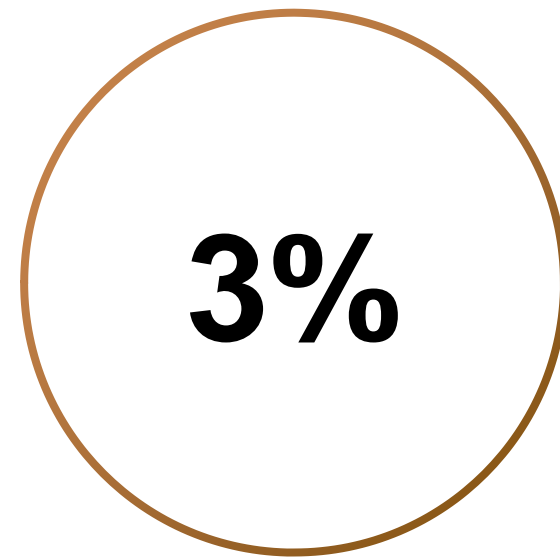
1. Firefighter SCBA full set
2. Industrial SCBA full set

2

Respirators market is moderately growing; KSA being major market



Estimated 2025 KSA market size. Million USD

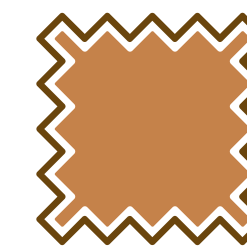


Forecasted 5-year CAGR

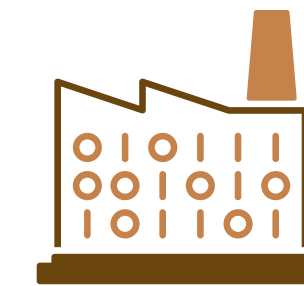
3

Attractive investment opportunities for Respirators value chain

### KSA value chain opportunities



Raw materials



Manufacturing & Assembly

### KSA enablers

- Financial support
- Regulatory incentives
- Technical enablers

#### Catalyzing Supply Chains

1. Oil, gas, and petrochemical industries where hazardous gases (e.g., hydrogen sulfide, carbon monoxide), and potential fires are a common risk

Note: SCBA = Self-Contained Breathing Apparatus;

Source: Saudi Aramco, Team analysis

# Respirators

## Potential Localized Categories

### Type(s)

Independent Air Supply (SCBA)

### Key Technical Specifications:



- Self-contained Breathing Apparatus (SCBA)
- 9COM: **6000001297**
- 9CAT: **1000973993 & 1001058774 & 1000904598**

#### 1. Firefighter SCBA full set:

- 60 Minutes
- CARBON FIBER CYLINDER
- NFPA and NIOSH

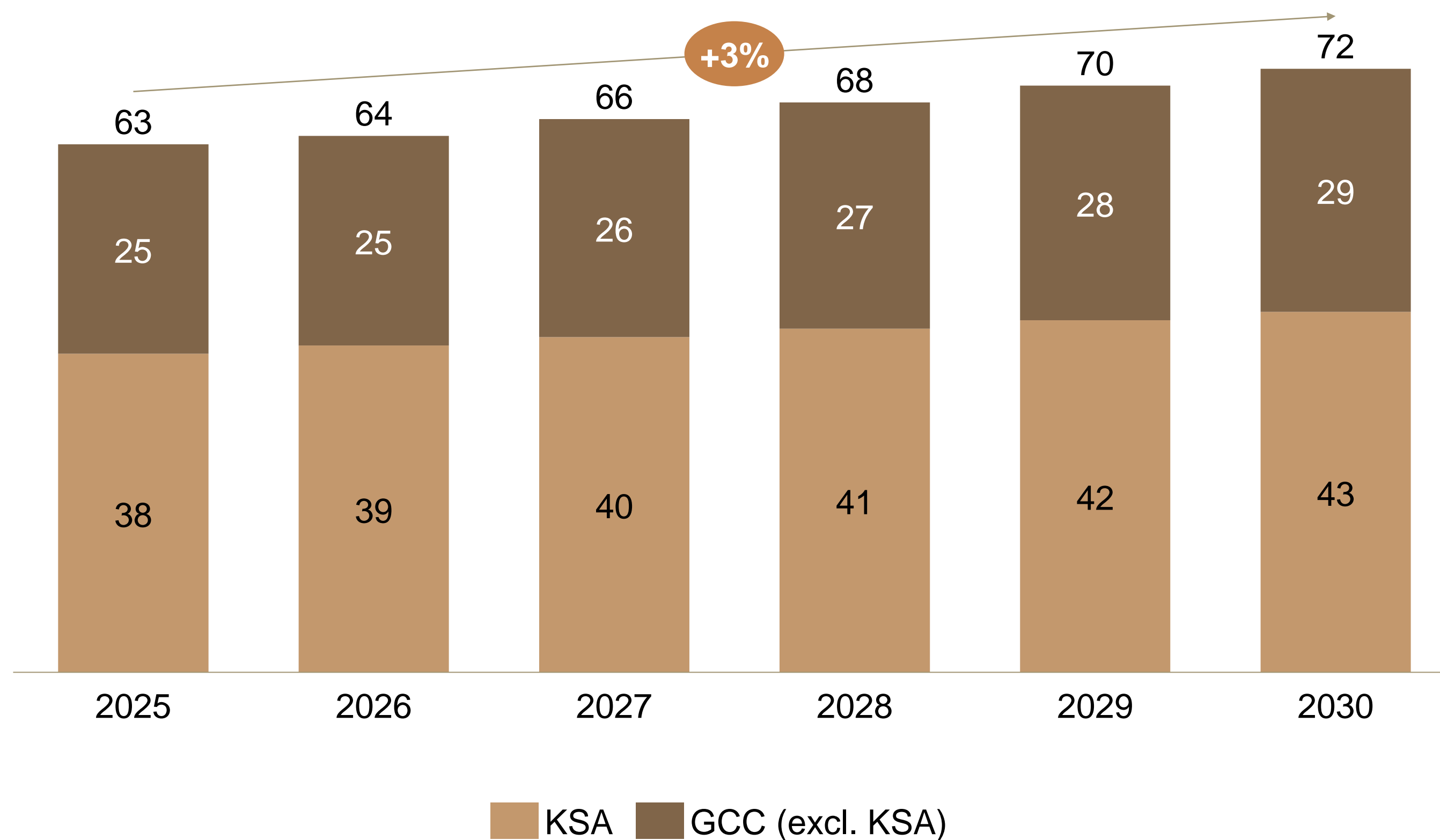
#### 2. Industrial SCBA full set:

- 30 minutes
- Aluminum cylinder
- NIOSH
- Full Flame Resistance Clothing.
- Reflective Straps.

Catalyzing Supply Chains

# Respirators Demand, Customers & Drivers

Forecasted KSA and rest of GCC Respirators market 2025-2030 (Million USD)



## Respirators customers in KSA

- Firefighting and civil defense
- Oil & Gas facilities
- Industrial and construction plants
- Large venues & specialized facilities<sup>1</sup>

## Key KSA demand drivers

- **Industrial expansion:** growth in O&G, petchem., mining, power generation, water desalination

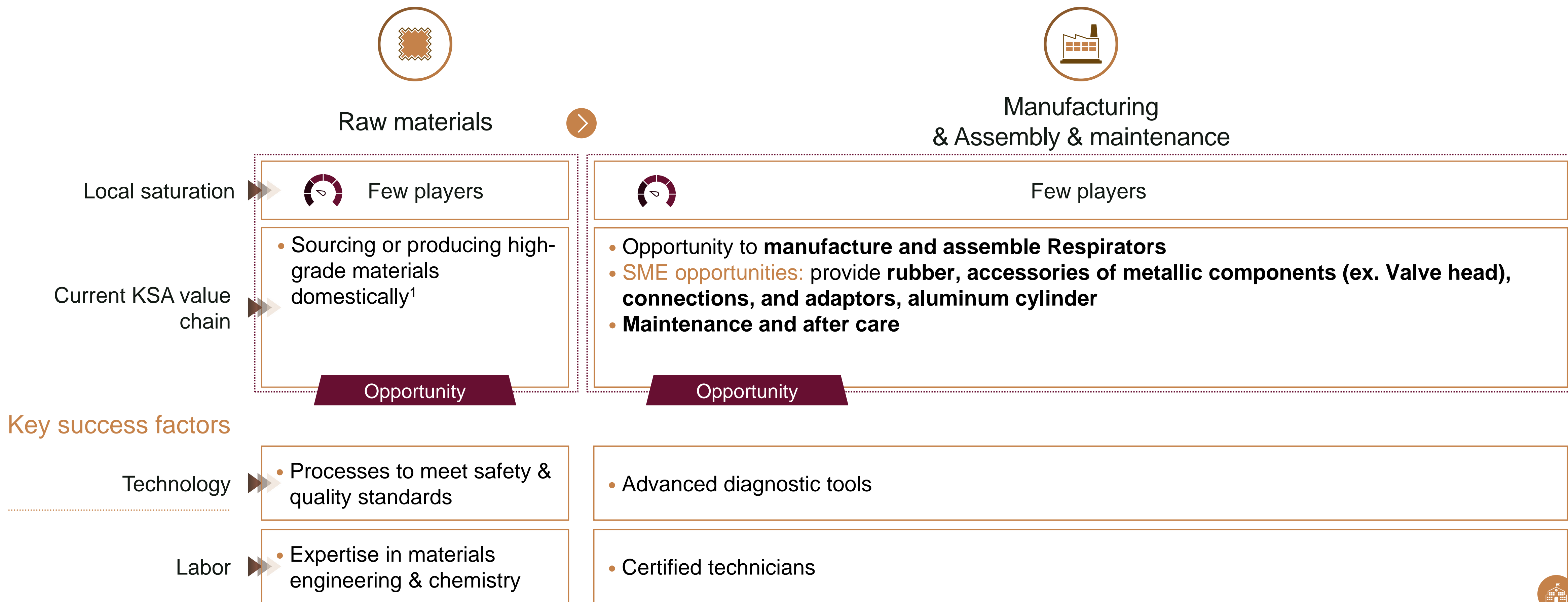
Fire protection workshop

### Catalyzing Supply Chains

1. Airports, stadiums, hospitals. Source: Saudi Aramco, Team analysis


# Respirators

## Value Chain and Key Localization Opportunities



Fire protection workshop

**Catalyzing Supply Chains**

 KSA National training center available

1. E.g., activated carbon, Electrostatic fibers, etc.  
Source: Data Bridge Market Research; Expert inputs; Team analysis

# Respirators

## Investment Opportunity and Enablers

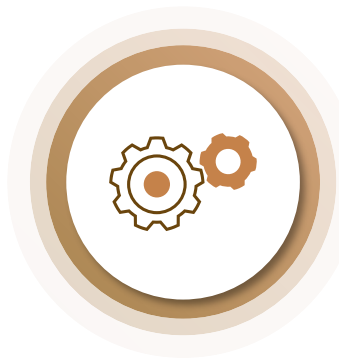
### Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

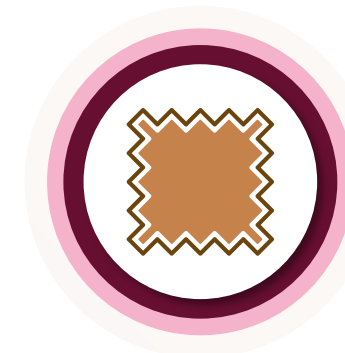


**Regulatory incentives:** Mandatory local procurement quotas for public and private firefighting needs

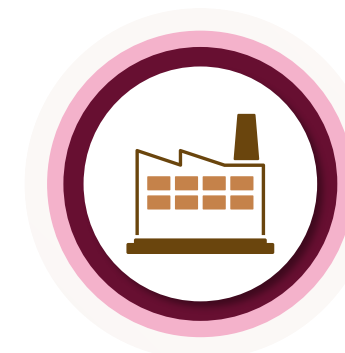


**Technical Enablers:** Advanced manufacturing support from KACST on technical guidance and infrastructure setup

### Where is the opportunity



**Raw materials**  
 Source or produce high-grade materials domestically<sup>1</sup>



**Manufacturing & Assembly**  
 Manufacture & assemble all types of respirators  
 For SMEs - opportunity to provide spare parts and components

#### Catalyzing Supply Chains

1. E.g., activated carbon, Electrostatic fibers, etc.

Note: SIDF = Saudi Industrial Development Fund; KACST = King Abdulaziz City for Science and Technology;

Source: Expert inputs; Team analysis

**12**

# Fire Hose Nozzle

*Presented by: Meshal Albash*

# Fire Hose Nozzle Opportunity Profile

1

Fire Hose Nozzle present an attractive investment opportunity

### Types



Firefighting hose nozzle



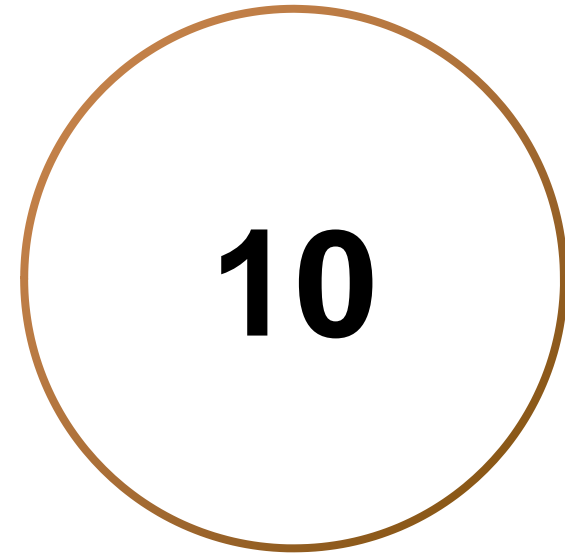
Occupant hose nozzle



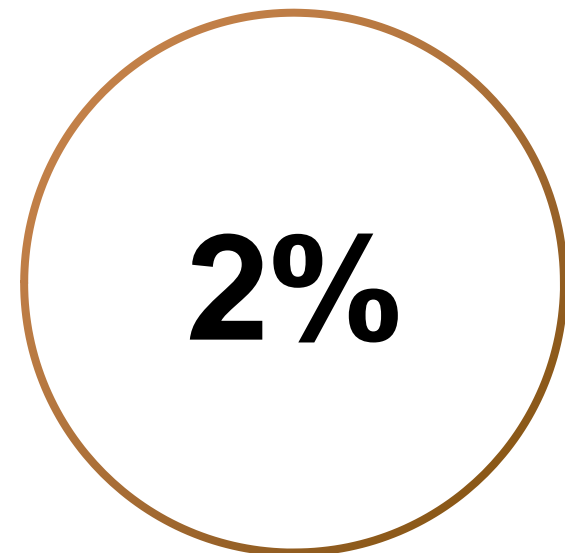
Live hose reel nozzle

2

Fire hose nozzle market is moderately growing; KSA being 60%+



Estimated 2025 KSA market size. Million USD

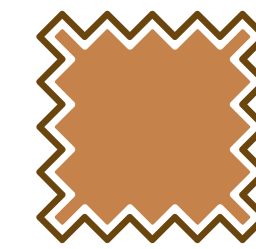


Forecasted 5-year CAGR

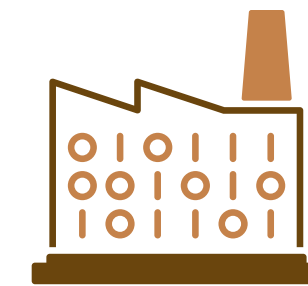
3

Attractive investment opportunities for Fire hose nozzle value chain

### KSA value chain opportunities



Raw materials



Manufacturing & Assembly

### KSA enablers

- Financial support
- Export duty exemptions
- Land and infrastructure

### Catalyzing Supply Chains

1. Oil, gas, and petrochemical industries where hazardous gases (e.g., hydrogen sulfide, carbon monoxide), and potential fires are a common risk; Source: Saudi Aramco, Team analysis

# Fire Hose Nozzle

## Potential Localized Categories

### Type(s)

Firefighting hose nozzle



Occupant hose nozzle



Live hose reel nozzle



### Key Technical Specifications:

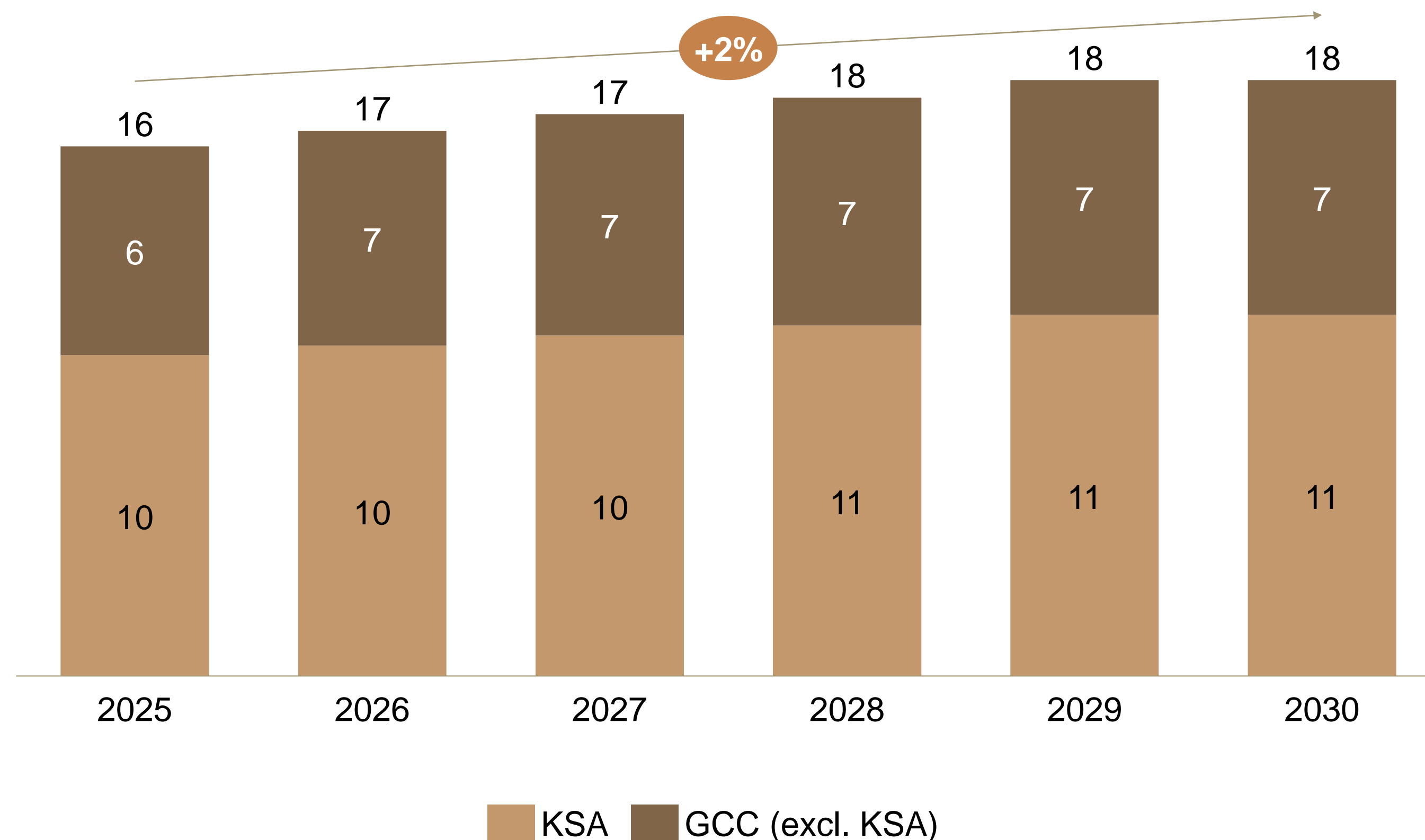
- 9COM: Multiple number and can be provided upon request

### Applications




- **FIXED APPLICATIONS:**
  - UL LISTED, FM APPROVD, US COAST GUARD OR VdS CERTIFIED.
  - Copper Alloys (less than 16%zinc).
  - Hand grip.
- **PORTABLE APPLICATIONS:**
  - UL LISTED OR FM APPROVED.
  - Aluminum alloys.
  - Hand grip.

# Fire Hose Nozzle Demand, Customers & Drivers

Forecasted KSA and rest of GCC Fire hose nozzle market 2025-2030 (Million USD)



## Fire hose nozzle customers in KSA

-  Firefighters
-  Oil & Gas facilities
-  Industrial, power, construction plants

## Key KSA demand drivers

- **Industrial expansion and diversification:** growth in O&G, petchem., manufacturing, power generation, water desalination
- **Firm regulations:** HCIS has been granted increased authority to regulate safety policies

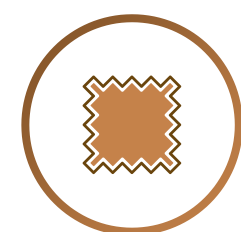
Fire protection workshop

### Catalyzing Supply Chains

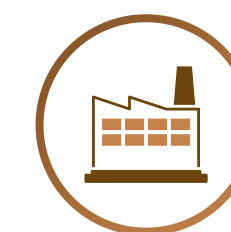
Note: HCIS = High Commission for Industrial Security  
Source: Saudi Aramco, Team analysis

# Fire Hose Nozzle

## Value Chain and Key Localization Opportunities



Raw materials



Manufacturing & Assembly



Local saturation



Few players



Few players

Current KSA value chain

- Sourcing or producing high-grade materials domestically<sup>1</sup>

- Opportunity to **manufacture Fire Hose Nozzle**
- **SME opportunities:** provide **metal components, rubber components and provide coating services**

Opportunity

Opportunity

### Key success factors

Technology

- Advanced material processing technologies

- Precision engineering (e.g., CNC machining)

Labor

- Expertise in metallurgy and materials science

- Expertise in design software & manufacturing processes

Fire protection workshop



Catalyzing Supply Chains



KSA National training center available

1. E.g., aluminum alloys, brass, stainless steel, plastic polymers;  
Source: Expert inputs; Team analysis

# Fire Hose Nozzle

## Investment Opportunity and Enablers

### Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

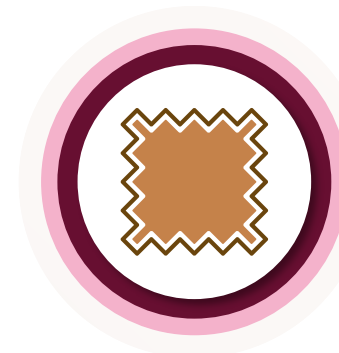


**Export duty exemptions:** Custom duties exemption on machinery and raw materials via the Industrial Center



**Land and infrastructure:** Subsidized land and infrastructure in economic zones (e.g., Modon) reduce setup costs & accelerate

### Where is the opportunity



**Raw materials**  
 Source or produce high-grade materials domestically<sup>1</sup>



**Manufacturing & Assembly**  
 Opportunity to manufacture Fire Hose Nozzle  
 For SMEs - opportunity to provide spare parts and components

### Catalyzing Supply Chains

Note: SIDF = Saudi Industrial Development Fund; 1. E.g., aluminum alloys, brass, stainless steel, plastic polymers.  
 Source: Expert inputs; Team analysis

# 13 Fire Extinguisher Blanket

*Presented by: Meshal Albash*

# Fire Extinguishing Blanket Opportunity Profile

1

Fire Extinguishing Blanket present an attractive investment opportunity

### Types



Wrap around wool blanket

2

Extinguishing Blanket market is moderately growing; KSA being major customer

19

Estimated 2025 KSA market size. Million USD

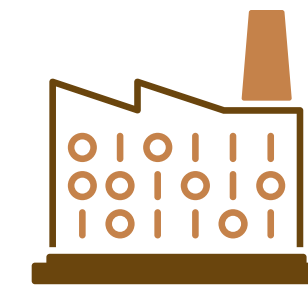
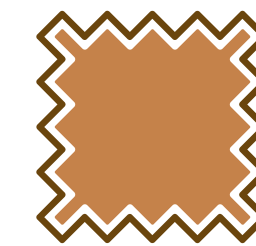
2%

Forecasted 5-year CAGR

3

Attractive investment opportunities for Extinguishing Blanket value chain

### KSA value chain opportunities



Raw materials Manufacturing

### KSA enablers

- Financial support
- Export duty exemptions
- Price preferential

#### Catalyzing Supply Chains

1. Oil, gas, and petrochemical industries where potential fires are a common risk;  
 Source: Saudi Aramco, Team analysis

# Fire Extinguishing Blanket Potential Localized Categories

## Type(s)

Wrap around wool blanket



## Applications

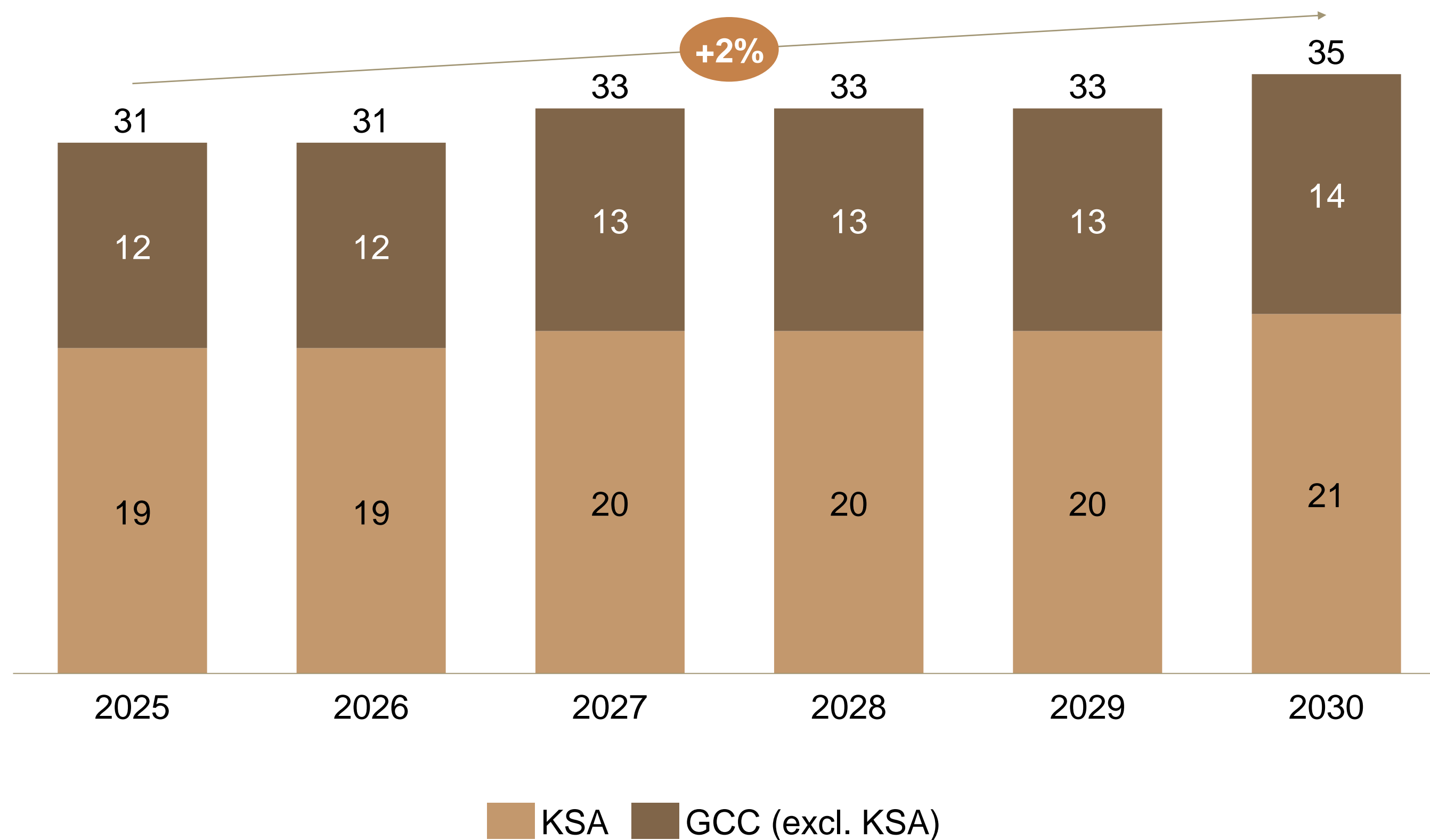
Used by Oil and Gas Industries and its Commercial Applications

## Key Technical Specifications:




- BLANKET; FIRE TYPE
- SIZE 1574.8 MM (62 IN) WD X 2082.8 MM (82 IN) LG.
- 100% WOOL
- FIRE RESISTANT TREATED.
- WALL MOUNTED TYPE BLANKET KIT.
- WRAP AROUND.
- METALLIC RED BOX WITH REFLECTIVE TEXT AND HIGH QUALITY PAINT (RAL 3000).
- 9CAT: **1000124087**
- UL Listed

# Fire Extinguishing Blanket Demand, Customers & Drivers

Forecasted KSA and rest of GCC Fire Extinguishing Blanket market 2025-2030 (Million USD)



## Fire Extinguishing Blanket customers in KSA

-  Residential & commercial properties
-  Oil & Gas facilities
-  Industrial & manufacturing facilities

## Key KSA demand drivers

- **Industrial expansion and diversification:** growth in O&G, petchem., manufacturing, power generation, water desalination
- **Firm regulations:** HCIS has been granted increased authority to regulate safety policies

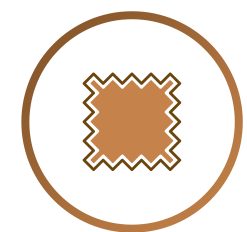
Fire protection workshop

### Catalyzing Supply Chains

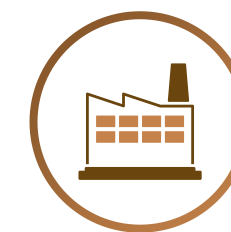
Note: HCIS = High Commission for Industrial Security  
Source: Saudi Aramco, Team analysis

# Fire Extinguishing Blanket

## Value Chain and Key Localization Opportunities



Raw materials



Manufacturing & Assembly



Local saturation



Few players



Few players

Current KSA value chain

- Producing and processing high-grade materials domestically<sup>1</sup>
- **SME opportunities:** provide **FRC raw material**

- Opportunity to **manufacture Fire Extinguishing Blanket**
- **SME opportunities:** provide **metal enclosure**

Opportunity

Opportunity

### Key success factors

Technology

- Advanced material processing technologies

- Advanced manufacturing technologies

Labor

- Expertise in handling and processing specialized materials

- Expertise in advanced manufacturing

Fire protection workshop

Catalyzing Supply Chains



KSA National training center available

1. E.g., fiberglass, silicone coating, aramid fibers;  
Source: Expert inputs; Team analysis

# Fire Extinguishing Blanket

## Investment Opportunity and Enablers

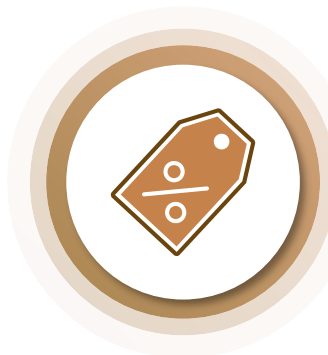
### Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

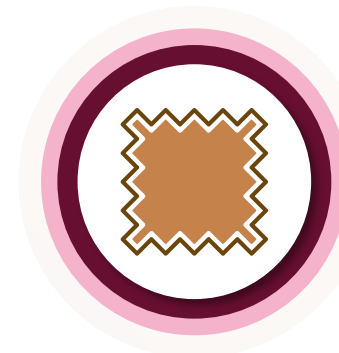


**Export duty exemptions:** Custom duties exemption on machinery and raw materials via the Industrial Center



**Price preferential:** 10% lower price for locally manufactured products by Local Content & Government Procurement Authority

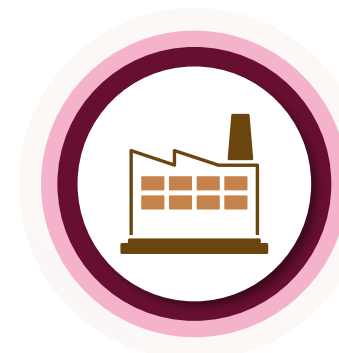
### Where is the opportunity



#### Raw materials

Source or produce high-grade materials domestically<sup>1</sup>

For SMEs - opportunity to provide raw materials (FRC)



#### Manufacturing

Increase localized manufacturing of blanket

For SMEs - opportunity to provide components

### Catalyzing Supply Chains

Note: SIDF = Saudi Industrial Development Fund; 1. E.g., fiberglass, silicone coating, aramid fibers.  
 Source: Expert inputs; Team analysis

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# Fireman Coat and Pant

*Presented by: Meshal Albash*

# Fireman Coat and Pant Opportunity Profile

1

Fireman Coat and Pant present an attractive investment opportunity

Type



Structural

2

Fireman Coat & Pant market is moderately growing; KSA being major market

27

Estimated 2025 KSA market size. Million USD

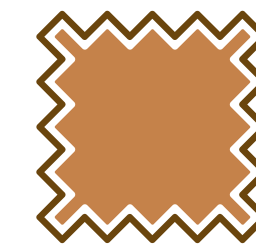
2%

Forecasted 5-year CAGR

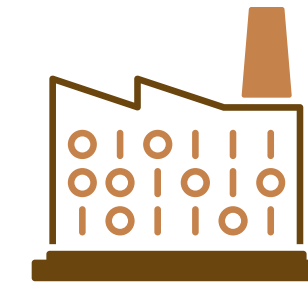
3

Attractive investment opportunities for Fireman Coat & Pant value chain

KSA value chain opportunities



Raw materials



Manufacturing

KSA enablers

- Financial support
- Regulatory incentives
- Streamlined licensing

## Fireman Coat and Pant Potential Localized Categories

### Type(s)

Structural

### Key Technical Specifications:



### Applications

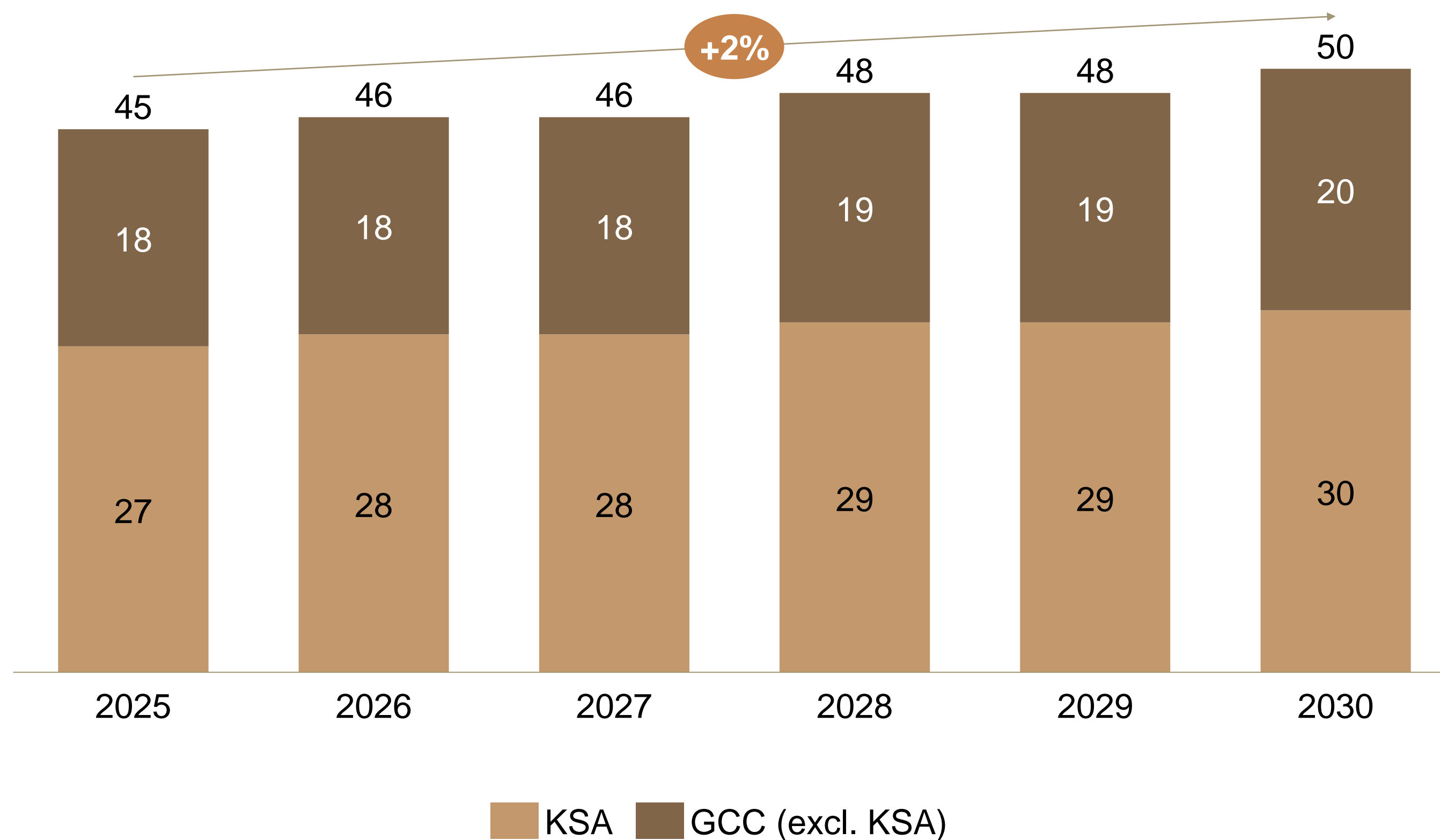
Used by Fire Department in the Industrial Applications

- 9CAT: **1000129126 & 1000129121 & 100012060 & 1000129064 & 1000129067 & 1000788020 & 1000788021 & 1000130247 & 1000130300 & 1000130307 & 1000130362 & 1000130367**
- Outer shell Ripstop 40% PBI 60% KEVLAR
- Thermal Liner 2 Layer Spunlaced Nomex
- Color in Gold / Tan Light Brown
- Stainless Steel Suspender Buttons
- UL Certified/Listed
- NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
- NFPA 1977 Standard on Protective Clothing and Equipment for Wildland Fire Fighting and Urban Interface Fire Fighting

Catalyzing Supply Chains

# Fireman Coat and Pant Demand, Customers & Drivers

Forecasted KSA and rest of GCC Fireman Coat and Pant market 2025-2030 (Million USD)



## Fireman Coat and Pant customers in KSA

- Government & Civil defense agencies
- Oil & Gas facilities
- Industrial, construction, manufacturing facilities

## Key KSA demand drivers

- **Industrial expansion and diversification:** growth in O&G, petchem., manufacturing, power generation, water desalination
- **Firm regulations:** HCIS has been granted increased authority to regulate safety policies

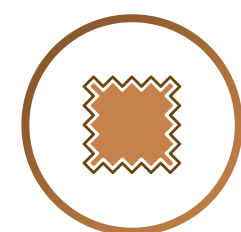
Fire protection workshop

### Catalyzing Supply Chains

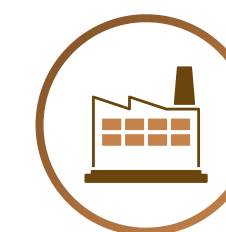
Note: HCIS = High Commission for Industrial Security  
Source: Saudi Aramco, Team analysis

# Fireman Coat and Pant

## Value Chain and Key Localization Opportunities



Raw materials



Manufacturing & Assembly



Local saturation



Few players



Few players

Current KSA value chain

- Localize production of specialized fibers<sup>1</sup> for firefighting coat and pant
- **SME opportunities:** provide **fabrics raw material**

- Opportunity to increase localized manufacturing of pants and coats
- **SME opportunities:** provide **metal attachments**

Opportunity

Opportunity

### Key success factors

Technology

- Advanced polymerization for heat-resistant fibers

- Advanced textile machinery for specialized fibers

Labor

- Expertise in chemical engineering and textile manufacturing

- Expertise in technical garment construction

Fire protection workshop

Catalyzing Supply Chains



KSA National training center available

1. E.g., Aramid, polybenzimidazole, modacrylic fibers  
Source: Expert inputs; Team analysis

# Fireman Coat and Pant

## Investment Opportunity and Enablers

### Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

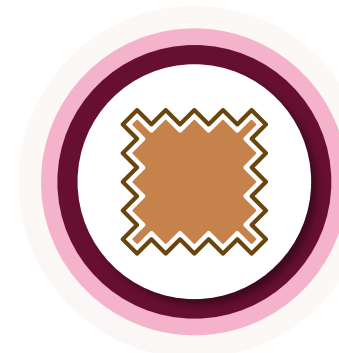


**Regulatory incentives:** Mandatory local procurement quotas for public and private firefighting needs



**Streamlined licensing:** Simplified processes and approvals to encourage new entrants in fire-resistant apparel production

### Where is the opportunity



#### Raw materials

Localize production of specialized fibers<sup>1</sup> for firefighting coat and pant  
 For SMEs - opportunity to provide fabrics



#### Manufacturing

Opportunity to increase localized manufacturing of pants and coats  
 For SMEs - opportunity to provide metal attachments

### Catalyzing Supply Chains

Note: SIDF = Saudi Industrial Development Fund; 1. E.g., Aramid, polybenzimidazole, modacrylic fibers.  
 Source: Expert inputs; Team analysis

**15**

# Fireman Helmet

*Presented by: Ghala Al Hajri*

# Fireman Helmet Opportunity Profile

1

Fireman Helmet present an attractive investment opportunity

Types



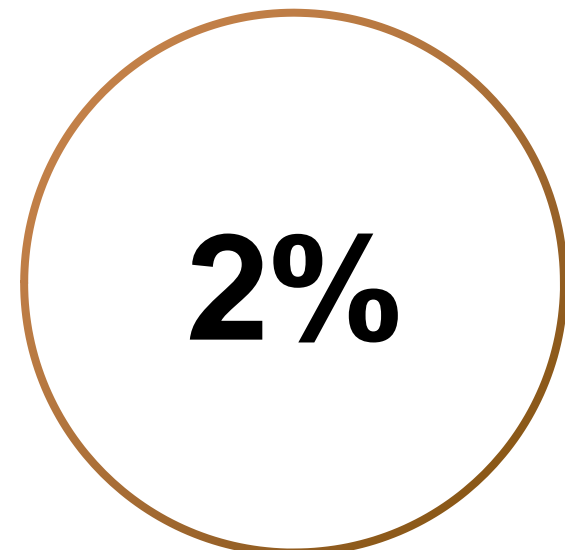
Structural

2

Fireman Helmet market is moderately growing; KSA being major market



Estimated 2025 KSA market size. Million USD

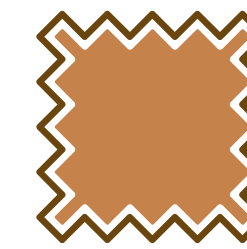


Forecasted 5-year CAGR

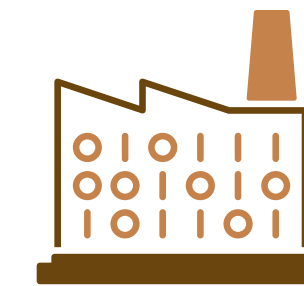
3

Attractive investment opportunities for Fireman Helmet value chain

KSA value chain opportunities



Raw materials



Manufacturing

KSA enablers

- Financial support
- Regulatory incentives
- Streamlined licensing

# Fireman Helmet

## Potential Localized Categories

### Type(s)

Structural



### Applications

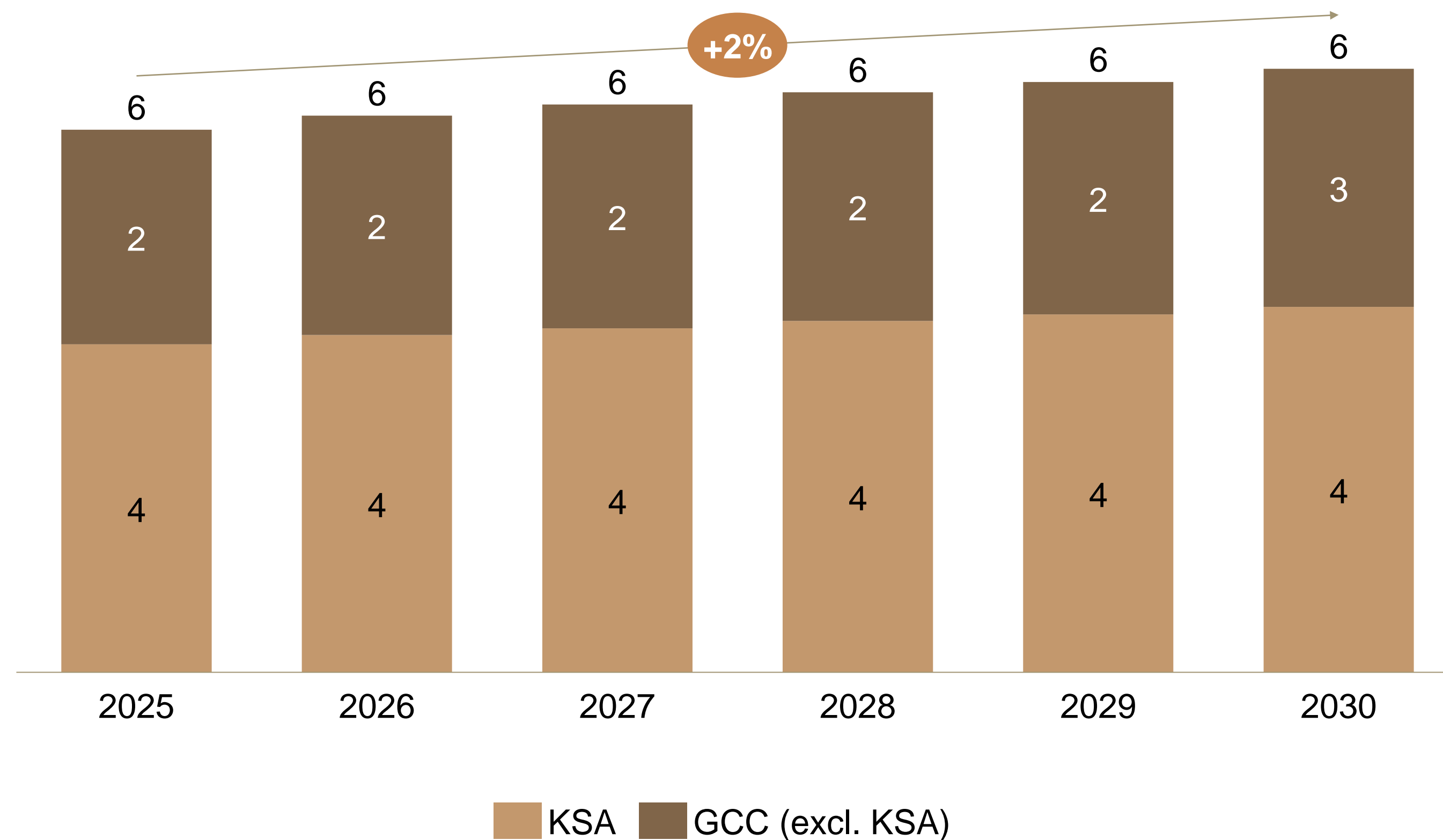
Used by Fire Department in the Industrial Applications

### Key Technical Specifications:




- 9CAT: **1000129955 & 1000129958 & 1000129967 & 1000129860**
- Fiber Glass
- NOMEX Earflaps & Neck Protection
- Strap Web Suspension With Synergistic Strap Lock System
- Removable & Replacement Impact Cap
- NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting
- OSHA 1971 & 1981

# Fireman Helmet Demand, Customers & Drivers

Forecasted KSA and rest of GCC Fireman Helmet market 2025-2030 (Million USD)



## Fireman Helmet customers in KSA

-  Government & Civil defense agencies
-  Oil & Gas facilities
-  Industrial, construction, manufacturing facilities

## Key KSA demand drivers

- **Industrial expansion and diversification:** growth in O&G, petchem., manufacturing, power generation, water desalination
- **Firm regulations:** HCIS has been granted increased authority to regulate safety policies

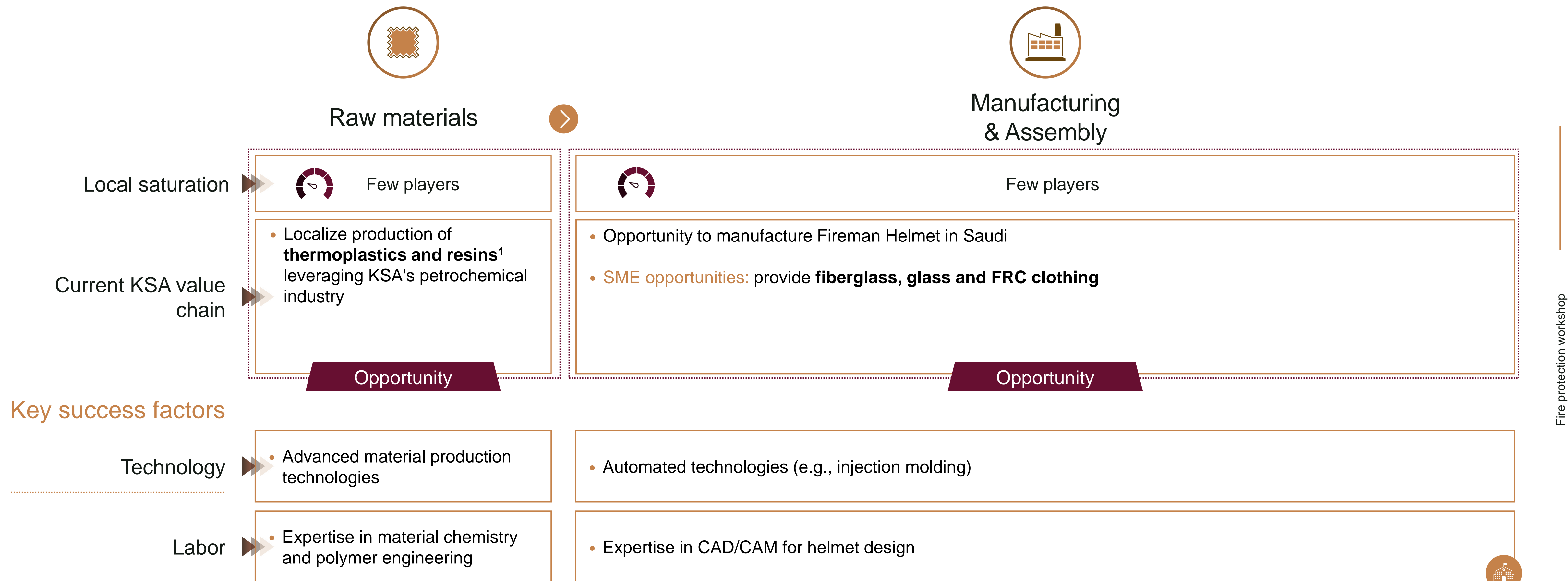
Fire protection workshop

### Catalyzing Supply Chains


Note: HCIS = High Commission for Industrial Security  
Source: Saudi Aramco, Team analysis

# Fireman Helmet

## Value Chain and Key Localization Opportunities



Catalyzing Supply Chains

 KSA National training center available

Note: CAD = Computer-aided design, CAM = Computer-aided manufacturing; 1. E.g., Aramid/Kevlar fibers, fiberglass composites  
Source: Expert inputs; Team analysis

# Fireman Helmet Investment Opportunity and Enablers

## Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

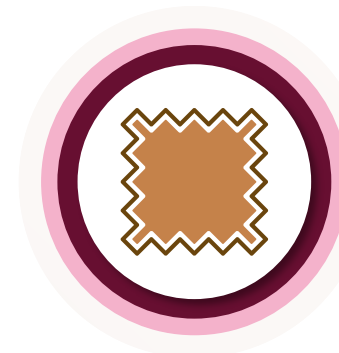


**Regulatory incentives:** Mandatory local procurement quotas for public and private firefighting needs



**Streamlined licensing:** Simplified processes and approvals to encourage new entrants in fire-resistant apparel production

## Where is the opportunity



### Raw materials

Localize production of thermoplastics and resins for helmets  
 For SMEs - opportunity to provide raw materials like FRC clothing, glass and fiberglass



### Manufacturing

Opportunity to increase localized manufacturing of helmets

## Catalyzing Supply Chains

Note: SIDF = Saudi Industrial Development Fund;  
 Source: Expert inputs; Team analysis

# 16

## Firefighter Boot

*Presented by: Ghala Al Hajri*

# Fireman Boot Opportunity Profile

1

Fireman Boot present an attractive investment opportunity

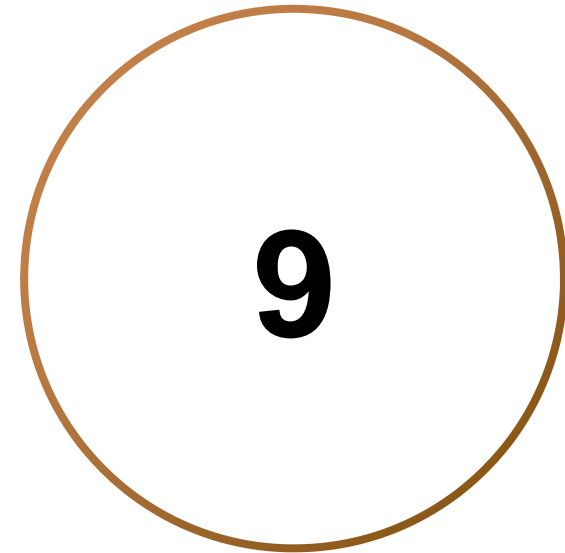
Type



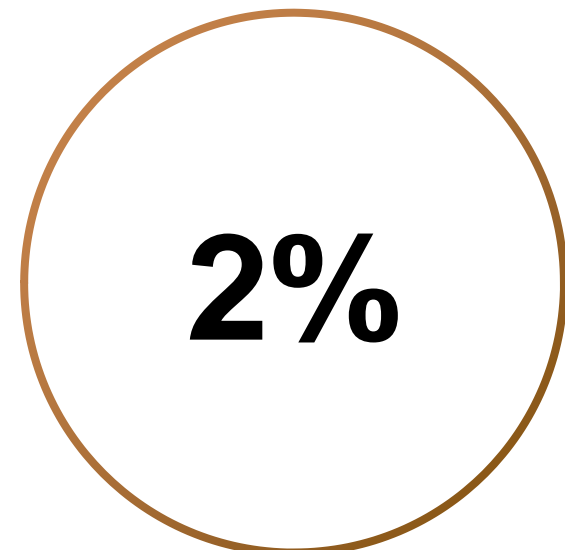
Structural

2

Fireman Boot market is moderately growing; KSA being major market



Estimated 2025 KSA market size. Million USD

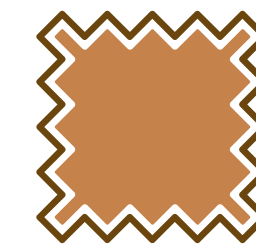


Forecasted 5-year CAGR

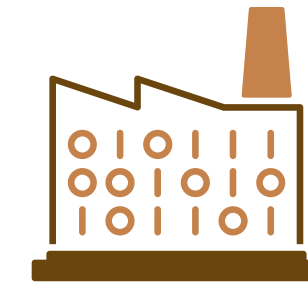
3

Attractive investment opportunities for Fireman Boot value chain

KSA value chain opportunities



Raw materials



Manufacturing

KSA enablers

- Financial support
- Regulatory incentives
- Streamlined licensing

# Fireman Boot

## Potential Localized Categories

### Type(s)



### Key Technical Specifications:

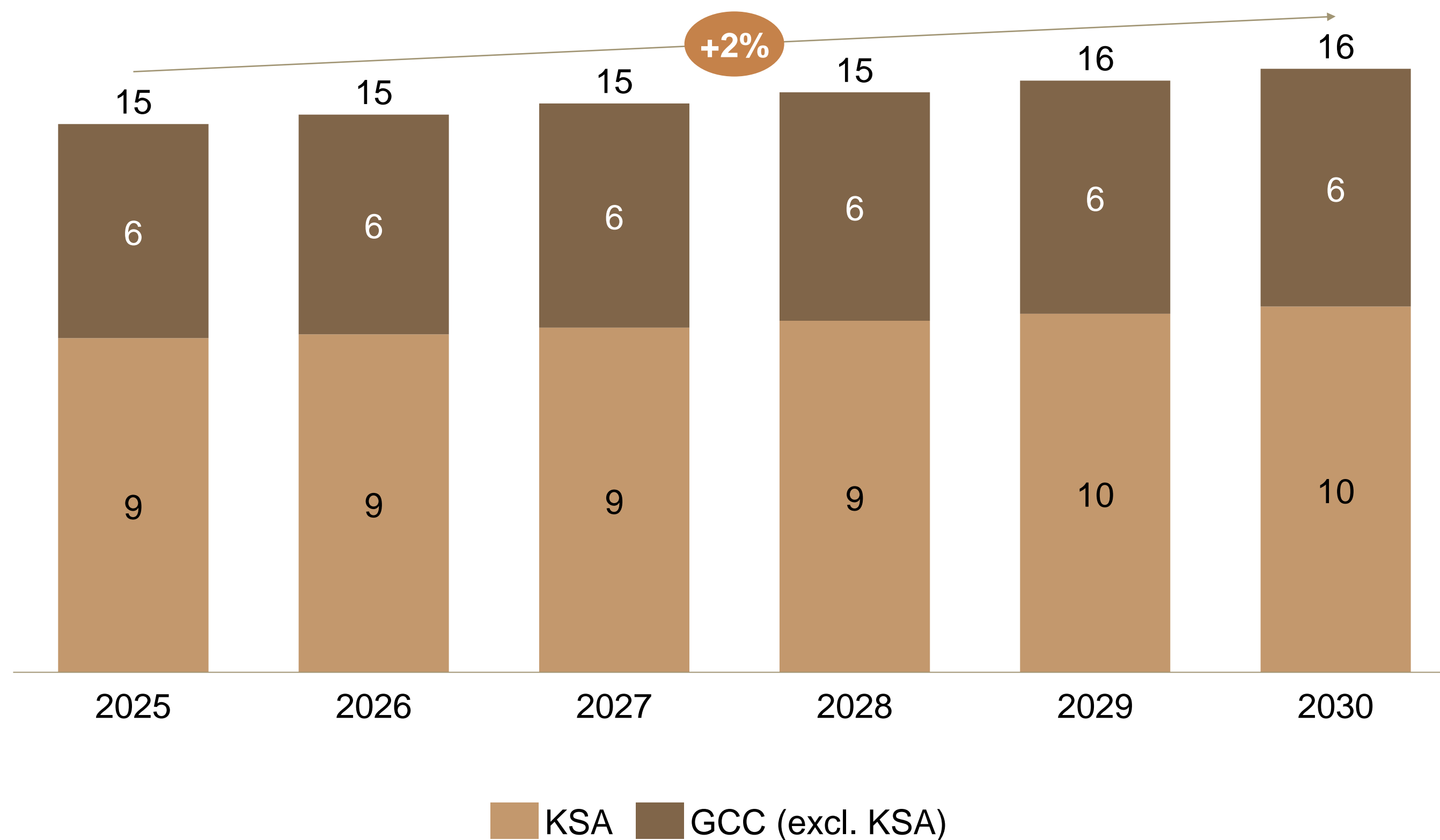
- 9CAT: **1000788057** (25-50 European Size )
- Color in Black
- 14 In Leg Height outer
- Leather
- Waterproof Hydrophobic
  
- NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting

### Applications




Used by Oil and Gas Industries

# Fireman Boot Demand, Customers & Drivers

Forecasted KSA and rest of GCC Fireman Boot market  
2025-2030 (Million USD)



## Fireman Boot customers in KSA

-  Government & Civil defense agencies
-  Oil & Gas facilities
-  Industrial, construction, manufacturing facilities

## Key KSA demand drivers

- **Industrial expansion and diversification:** growth in O&G, petchem., manufacturing, power generation, water desalination
- **Firm regulations:** HCIS has been granted increased authority to regulate safety policies

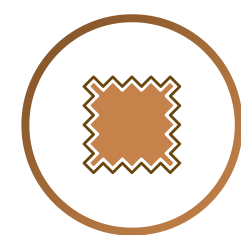
Fire protection workshop

### Catalyzing Supply Chains

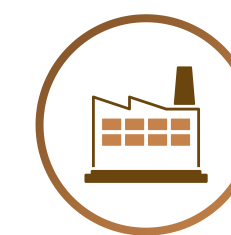
Note: HCIS = High Commission for Industrial Security  
Source: Saudi Aramco, Team analysis

# Fireman Boot

## Value Chain and Key Localization Opportunities



Raw materials



Manufacturing

Local saturation



Few players



Few players

Current KSA value chain

- Localize production of raw materials<sup>1</sup>
- **SME opportunities: provide leather and plastics**

- Opportunity to **manufacture Fireman Boot** in Saudi

Opportunity

Opportunity

### Key success factors

Technology

- Advanced chemical processing technologies

- Precision manufacturing

Labor

- Expertise in chemical/material engineering

- Expertise in CAD/CAM for helmet design

Fire protection workshop

Catalyzing Supply Chains



KSA National training center available

Note: CAD = Computer-aided design, CAM = Computer-aided manufacturing; 1. E.g., flame-resistant leather, Kevlar, rubber compounds, steel or composite toe caps  
Source: Expert inputs; Team analysis

# Fireman Boot

## Investment Opportunity and Enablers

### Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

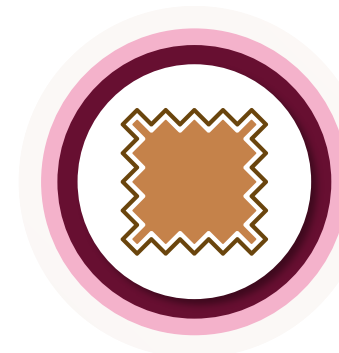


**Regulatory incentives:** Mandatory local procurement quotas for public and private firefighting needs



**Streamlined licensing:** Simplified processes and approvals to encourage new entrants in fire-resistant apparel production

### Where is the opportunity



#### Raw materials

Localize production of specialized fibers<sup>1</sup> for fireman boot  
 For SMEs - opportunity to provide leather and plastics



#### Manufacturing

Opportunity to increase localized manufacturing of the boots

### Catalyzing Supply Chains

Note: SIDF = Saudi Industrial Development Fund; 1. E.g., flame-resistant leather, Kevlar, rubber compounds, steel or composite toe caps.  
 Source: Expert inputs; Team analysis

# 17

## Safety Hood

*Presented by: Ghala Al Hajri*

# Safety Hood Opportunity Profile

1

Safety Hood present an attractive investment opportunity

### Types



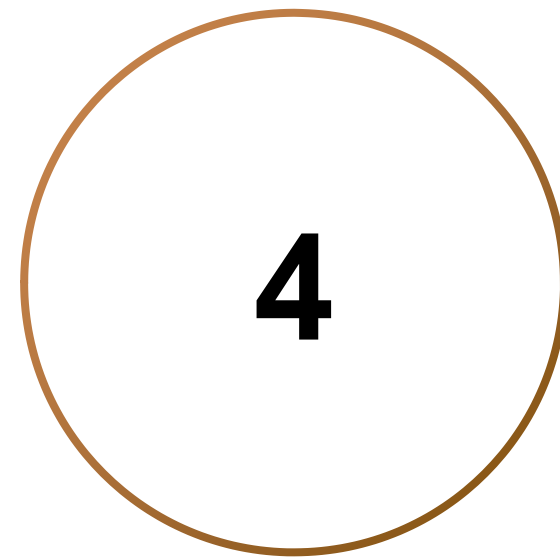
Single-layer



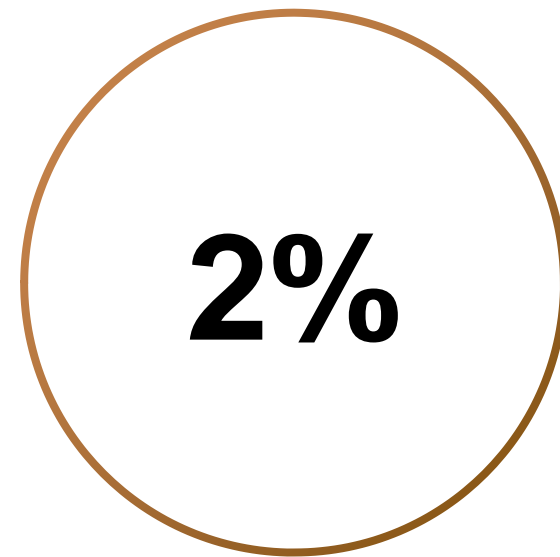
Multi-layer

2

Safety Hood market is moderately growing; KSA being major market



Estimated 2025 KSA market size. Million USD

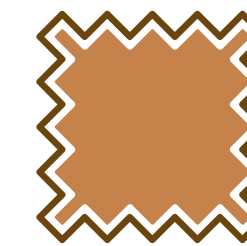


Forecasted 5-year CAGR

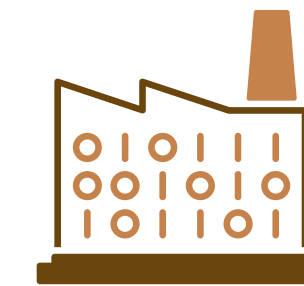
3

Attractive investment opportunities for Safety Hood value chain

### KSA value chain opportunities



Raw materials



Manufacturing

### KSA enablers

- Financial support
- Regulatory incentives
- Streamlined licensing

# Safety Hood

## Potential Localized Categories

Type(s)

Single-layer

Multi-layer

Key Technical Specifications:



Applications

Low-risk firefighting or training

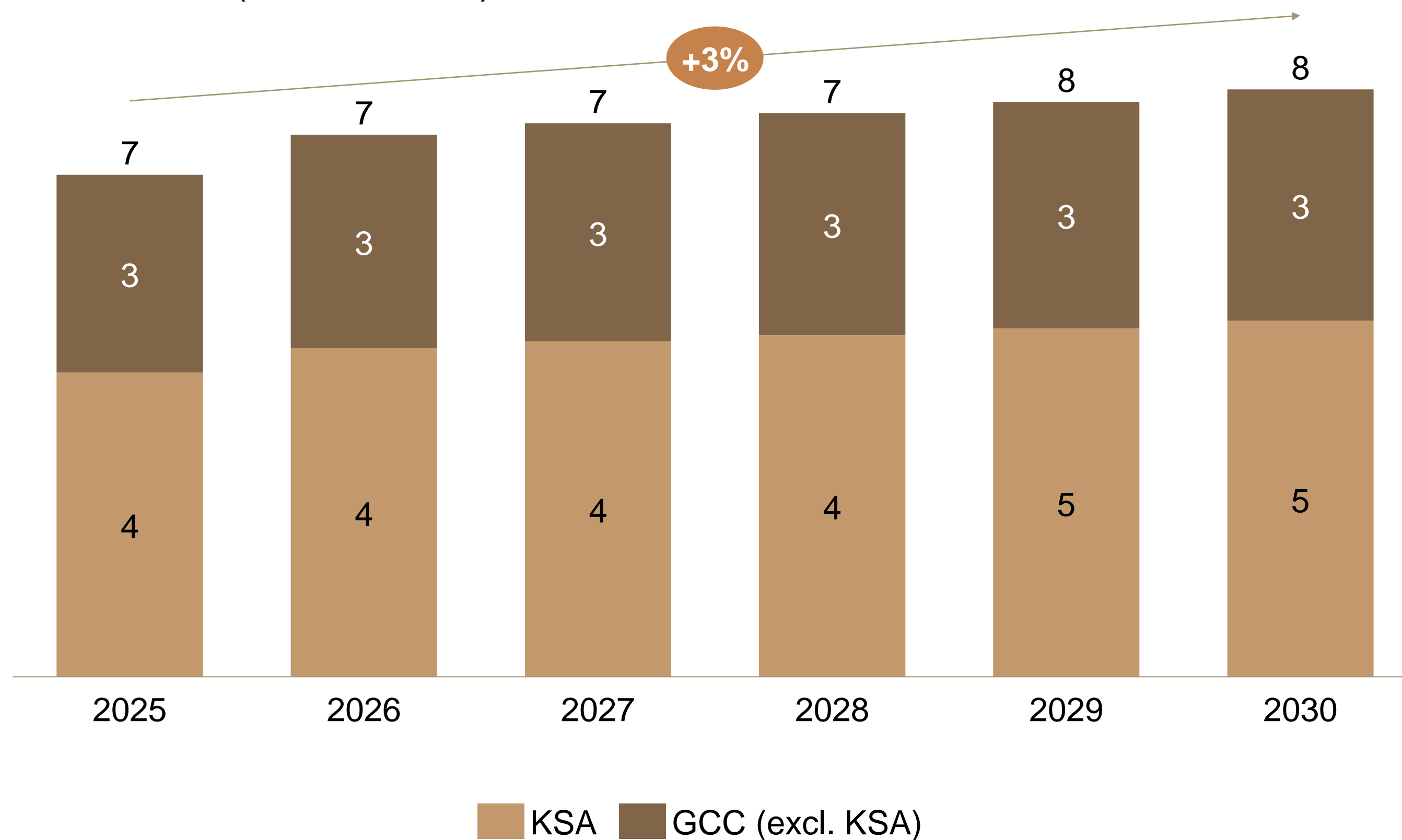
High-heat, prolonged firefighting

- 9CAT: **1000130022** and **1001048906**
- Color in Tan , Yellow, Black
- P-84 Rayon/Kevlar Blend Nomex or equal
- Face opening feature to accommodate any facepiece
- UL Certified/Listed or labeled as designed to cover and provide protection to the head
- NFPA 1971 Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting




Catalyzing Supply Chains

# Safety Hood Demand, Customers & Drivers

Forecasted KSA and rest of GCC Safety Hood market 2025-2030 (Million USD)



## Fireman Safety Hood customers in KSA

-  Government & Civil defense agencies
-  Oil & Gas facilities
-  Industrial, construction, manufacturing facilities

## Key KSA demand drivers

- **Industrial expansion and diversification:** growth in O&G, petchem., manufacturing, power generation, water desalination
- **Firm regulations:** HCIS has been granted increased authority to regulate safety policies

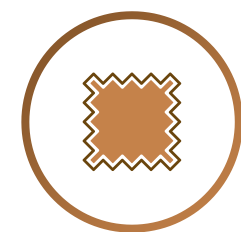
Fire protection workshop

### Catalyzing Supply Chains

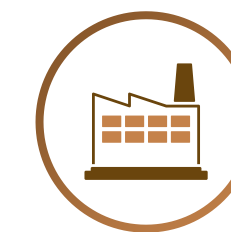
Note: HCIS = High Commission for Industrial Security  
Source: Saudi Aramco, Team analysis

# Safety Hood

## Value Chain and Key Localization Opportunities



Raw materials



Manufacturing



Local saturation



Few players



Few players

Current KSA value chain

- Localize production of raw materials<sup>1</sup>, focusing on **fibers and fabrics**
- **SME opportunities**: provide **nomex or equivalent**

- Opportunity to **manufacture safety hoods** in Saudi

Opportunity

Opportunity

### Key success factors

Technology

- Advanced polymerization and spinning technologies

- Advanced sewing and assembly techniques

Labor

- Expertise chemical engineering and textile manufacturing

- Expertise in specialized garment manufacturing

Fire protection workshop



Catalyzing Supply Chains



KSA National training center available

1. E.g., aramid fibers, carbon-based fabrics, flame-retardant cotton blends  
Source: Expert inputs; Team analysis

# Safety Hood

## Investment Opportunity and Enablers

### Key enablers in KSA to drive success



**Financial support:** Access to subsidized capital and financial support from SIDF (e.g., WC loans, 'Afaq' program)

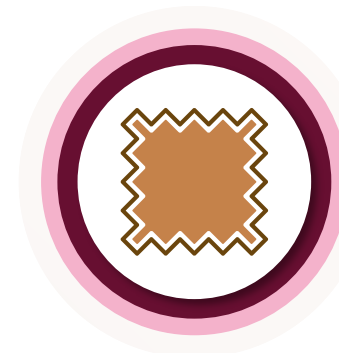


**Regulatory incentives:** Mandatory local procurement quotas for public and private firefighting needs

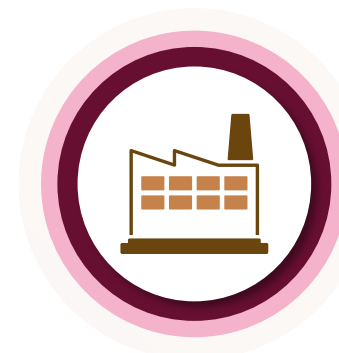


**Streamlined licensing:** Simplified processes and approvals to encourage new entrants in fire-resistant apparel production

### Where is the opportunity



**Raw materials**  
 Localize production of specialized fibers and fabrics<sup>1</sup> for safety hoods  
 For SMEs - opportunity to provide nomex or equivalent



**Manufacturing**  
 Opportunity to increase localized manufacturing of safety hood types

#### Catalyzing Supply Chains

Note: SIDF = Saudi Industrial Development Fund; 1. E.g., aramid fibers, carbon-based fabrics, flame-retardant cotton blends.  
 Source: Expert inputs; Team analysis

**Thank  
You**